NOTICE OF ALLOWANCE AND FEE(S) DUE

22850	7590	06/01/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
BADAWI, SHERIEF

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 06/01/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,623	08/22/2003	Hiroshi Taira	241931US2S	8260

TITLE OF INVENTION: PROGRAM, SYSTEM AND METHOD FOR ANALYZING RETRIEVAL KEYWORD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	09/01/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>   **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or <u>Fax</u>   **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

22850   7590   06/01/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,623	08/22/2003	Hiroshi Taira	241931US2S	8260

TITLE OF INVENTION: PROGRAM, SYSTEM AND METHOD FOR ANALYZING RETRIEVAL KEYWORD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	09/01/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
BADAWI, SHERIEF	2167	707-705000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) :   ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.   OMB 0651-0033   U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,623	08/22/2003	Hiroshi Taira	241931US2S	8260

			EXAMINER
22850	7590	06/01/2010	BADAWI, SHERIEF

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 06/01/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1887 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1887 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101   or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/645,623	TAIRA ET AL.
	Examiner	Art Unit	
	SHERIEF BADAWI	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *4/26/2010*.

2. ☒ The allowed claim(s) is/are *1-34*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

            International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/S. B./	/Luke S. Wassum/
Examiner, Art Unit 2167	Primary Examiner
	Art Unit 2167

DETAILED ACTION

1.   This office action is in response to the amendment filed on April 26, 2010, in which claims

1-34 are presented for further examination.

Allowable Subject Matter

2.   Claims 1-34 are allowable in light of the prior art made of record.

EXAMINER'S AMENDMENT

3.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312.

To ensure consideration of such an amendment, it MUST be submitted no later than the payment of

the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Edward Tracy

(Reg. No. 47,998) on May 19, 2010.

The application has been amended as follows:

1. An article of manufacture comprising a computer usable medium having computer readable

program code ~~means~~ embodied therein, the computer readable program code ~~means~~ comprising:

computer readable program code ~~means~~ for causing a computer to extract an access sequence

indicating a continuous access by a same requester based on a Web access log which relates first

identification data indicating an access requester to second identification data indicating contents to

be accessed; computer readable program code ~~means~~ for causing a computer to extract, when the

Web access log relates second identification data indicating a retrieval system to a retrieval keyword

which is input to the retrieval system by the requester, the retrieval keyword from the Web access

log; and computer readable program code ~~means~~ for causing a computer to calculate a qualitative

evaluation value of the access sequence based on a qualitative evaluation rule for defining the

qualitative evaluation value of a retrieval result of the retrieval system, and create first relation data

indicating a relation between the qualitative evaluation value and a retrieval keyword which is input

in the access sequence.

2. An article of manufacture according to claim 1, further comprising: computer readable program

code ~~means~~ for causing a computer to calculate a quantitative evaluation value of the access

sequence based on a quantitative evaluation rule for defining the quantitative evaluation value of a

retrieval result of the retrieval system, and create second relation data indicating a relation of the

retrieval keyword which is input in the access sequence, the qualitative evaluation value and the

quantitative evaluation value.

3. An article of manufacture according to claim 2, further comprising: computer readable program

code ~~means~~ for causing a computer to create a graph indicating a relation of the qualitative

evaluation value and the quantitative evaluation value based on the second relation data.

4. An article of manufacture according to claim 2, wherein the quantitative evaluation value

comprises a need value for a retrieval result which increases as the number of inputs of the retrieval

keyword increases; and the quantitative evaluation rule comprises a rule under which the need value

increases as the number of inputs of the retrieval keyword increases.

5. An article of manufacture according to claim 2, wherein the Web access log further relates access time data to the first identification data and the second identification data; and the quantitative evaluation value calculating program code ~~means~~ creates the second relation data for each time period based on the access time data, and which further comprises: computer readable program code ~~means~~ for causing a computer to create trend data for the retrieval keyword, the trend data indicating a transition of the qualitative evaluation value and the quantitative evaluation value based on the second relation data for each time period.

6. An article of manufacture according to claim 5, wherein the Web access log further relates an access time data to the first identification data and the second identification data; and the quantitative evaluation value calculating program code ~~means~~ creates the second relation data for each time period based on the access time data, and which further comprises: computer readable program code ~~means~~ for causing a computer to calculate the qualitative evaluation value and the quantitative evaluation value for each category and for each time period based on the second relation data and category data which relates the retrieval keyword to a category to which the keyword belongs; and computer readable program code ~~means~~ for causing a computer to create trend data for the retrieval keyword, the trend data indicating a transition of the qualitative evaluation value and the quantitative evaluation value for each time period and each category.

7. An article of manufacture according to claim 6, wherein the trend data obtaining program code ~~means~~ comprises: computer readable program code ~~means~~ for causing a computer to detect a region to which the retrieval keyword belongs of regions determined by the boundaries at each time period; computer readable program code ~~means~~ for causing a computer to determine whether the retrieval

keyword belonging region changes; and computer readable program code means for causing a computer to add a message corresponding to a change in the region to a retrieval keyword in which the region is changed, and the trend data includes data indicating a result produced by adding the message to the retrieval keyword in which the region is changed.

8. An article of manufacture according to claim 5, wherein the trend data obtaining program code means calculates a moving distance and a moving direction of the retrieval keyword at each switching of the time period based on the qualitative evaluation value and the quantitative evaluation value of each time period, and the trend data includes data indicating the moving distance and the moving direction of the retrieval keyword at each switching of the time period.

9. An article of manufacture according to claim 5, wherein the trend data obtaining program code means comprises: computer readable program code means for causing a computer to calculate a moving distance of the retrieval keyword at each switching of each time period based on the qualitative evaluation value and the quantitative evaluation value of the retrieval keyword at each time period; computer readable program code means for causing a computer to determine whether or not the moving distance exceeds a threshold; computer readable program code means for causing a computer to acquire the moving direction of the retrieval keyword when the moving distance exceeds the threshold; and computer readable program code means for causing a computer to add a message corresponding to the moving direction to a retrieval keyword in which the moving distance exceeds the threshold, and the trend data includes data produced by adding the message to the retrieval keyword in which the moving distance exceeds the threshold.

10. An article of manufacture according to claim 5, further comprising: computer readable program code ~~means~~ for causing a computer to arrange indexes indicating the retrieval keyword of each time period corresponding to the qualitative evaluation value and the quantitative evaluation value on a space which adopts the qualitative evaluation value and the quantitative evaluation value as multiple axes, based on the trend data and display a graph by connecting the indexes with lines corresponding to an elapse order of the time period.

11. An article of manufacture according to claim 2, wherein the Web access log relates the first identification data and the second identification data to access time data, and the quantitative evaluation value calculating program code ~~means~~ creates the second relation data for each time period based on the access time data, and which further comprises: computer readable program code ~~means~~ for causing a computer to calculate the qualitative evaluation value and the quantitative evaluation value on the category of each time period based on category data which relates the retrieval keyword to a category to which the retrieval keyword belongs and relation data of each time period; and computer readable program code ~~means~~ for causing a computer to create trend data indicating a transition of the qualitative evaluation value and the quantitative evaluation value on the category.

12. An article of manufacture according to claim 11, further comprising: computer readable program code ~~means~~ for causing a computer to arrange indexes indicating the category of each time period corresponding to the qualitative evaluation value and the quantitative evaluation value on a space which adopts the qualitative evaluation value and the quantitative evaluation value as multiple axes,

based on the trend data and display a graph by connecting the indexes with lines corresponding to an elapse order of the time period.

13. An article of manufacture according to claim 1, wherein the Web access log further relates the second identification data to reference information including a retrieval keyword, the access sequence extracting program code ~~means~~ comprises a program code ~~means~~ for causing a computer to extract, when the reference information indicates the retrieval system, an access sequence including an access to contents related to the reference information, the retrieval keywords extracting program code ~~means~~ comprises a program code for causing a computer to extract the retrieval keyword included in the reference information; and the qualitative evaluation value calculating program code ~~means~~ comprises a program code ~~means~~ for causing a computer to calculate a qualitative evaluation value of the access sequence after the retrieval keyword included in the reference information is input.

14. An article of manufacture according to claim 1, wherein a retrieval keyword to be analyzed is input in the access sequence and contents indicated by second identification data related to the retrieval keyword to be analyzed are accessed after the retrieval keyword to be analyzed is input, the qualitative evaluation rule comprises a rule which, based on the extracted keyword and relation data between the retrieval keyword to be analyzed and second identification data indicating contents which increases a success degree when the contents are accessed after the retrieval keyword to be analyzed is input, increases the success degree of the access sequence, and the qualitative evaluation value comprises the success degree.

15. An article of manufacture according to claim 14, wherein the qualitative evaluation rule increases the success degree as the number of accesses until the contents to be accessed indicated by the second identification data related with the retrieval keyword to be analyzed is accessed after the retrieval keyword to be analyzed is input, decreases.

16. An article of manufacture according to claim 1, wherein the Web access log relates the first identification data and the second identification data to access time data for each access, the qualitative evaluation rule comprises a rule which increases the satisfaction degree of the access requester as a time interval from an access after the retrieval keyword is input to a last access increases, and the qualitative evaluation value comprises the satisfaction degree.

17. An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein, the computer readable program code means comprising: computer readable program code means for causing a computer to extract an access sequence indicating a continuous access by a same requester based on a Web access log which relates first identification data indicating an access requester to second identification data indicating contents to be accessed; computer readable program code means for causing a computer to extract, when the Web access log relates second identification data indicating a retrieval system to a retrieval keyword which is input to the retrieval system by the requester and the retrieval keyword is input in the access sequence, the retrieval keyword which is input in the access sequence from the Web access log; and computer readable program code means for causing a computer to calculate a qualitative evaluation value of the access sequence based on a qualitative evaluation rule for defining the qualitative

evaluation value of a retrieval result of the retrieval system, and create first relation data indicating a

relation between the extracted retrieval keyword and the qualitative evaluation value.

18. An article of manufacture comprising a computer usable medium having computer readable

program code means embodied therein, the computer readable program code means comprising:

computer readable program code means for causing a computer to extract, based on a Web access

log which relates first identification data indicating an access requester, second identification data

indicating contents to be accessed, and reference information, an access sequence indicating a

continuous access including an access to the contents to be accessed indicated by the second

identification data by a same requester when the reference information indicates a retrieval system;

computer readable program code means for causing a computer to extract a retrieval keyword

included in the reference information when the reference information indicates the retrieval system;

and computer readable program code means for causing a computer to calculate a qualitative

evaluation value of the access sequence after inputting the extracted retrieval keyword based on a

qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the

retrieval system, and create first relation data indicating a relation between the qualitative evaluation

value and the retrieval keyword corresponding to the access sequence.

19. An article of manufacture comprising a computer usable medium having computer readable

program code means embodied therein, the computer readable program code means comprising:

computer readable program code means for causing a computer to extract, based on a Web access

log which relates first identification data indicating an access requester to second identification data

indicating contents to be accessed, a sub-access sequence indicating a continuous access by a same

requester; computer readable program code ~~means~~ for causing a computer to extract the retrieval

keyword when the Web access log relates second identification data indicating a retrieval system to a

retrieval keyword input to the retrieval system by the requester; and computer readable program

code ~~means~~ for causing a computer to calculate a qualitative evaluation value of the sub-access

sequence based on a qualitative evaluation rule for defining the qualitative evaluation value of a

retrieval result of the retrieval system, and create relation data indicating a relation between the

extracted retrieval keyword and the qualitative evaluation value.

20. An article of manufacture according to claim 19, wherein the sub-access sequence has a starting

end at which retrieval result contents are accessed and a terminal end at which a next continuous

access starts.

21. An article of manufacture according to claim 19, wherein the sub-access sequence has a starting

end at which retrieval result contents are accessed and a terminal end which is a last access preceding

to a next starting end.

22. An article of manufacture according to claim 19, wherein the sub-access sequence has a starting

end at which retrieval result contents are accessed and a terminal end which is a last access preceding

to a next starting end when the next starting end is found, and having the starting end and a terminal

end at which the continuous access ends when the next starting end is not found.

23. A retrieval keyword analyzing system comprising: an access sequence extracting unit configured

to extract an access sequence indicating a continuous access by a same requester based on a Web

access log which relates first identification data indicating an access requester to second

identification data indicating contents to be accessed; a keyword extracting unit configured to

extract, when the Web access log relates second identification data indicating a retrieval system to a

retrieval keyword input to the retrieval system by the requester, the retrieval keyword from the Web

access log; and a satisfaction degree calculation unit configured to calculate a qualitative evaluation

value of the access sequence based on a qualitative evaluation rule for defining the qualitative

evaluation value of a retrieval result of the retrieval system, and creating first relation data indicating

a relation between the qualitative evaluation value and a retrieval keyword which is input in the

access sequence.

24. The retrieval keyword analyzing system according to claim 23, further comprising: a need valued

calculation unit configured to calculate a quantitative evaluation value of the access sequence based

on a quantitative evaluation rule for defining the quantitative evaluation value of a retrieval result of

the retrieval system, and to create second relation data indicating a relation of the retrieval keyword

which is input in the access sequence, the qualitative evaluation value and the quantitative evaluation

value.

25. A retrieval keyword analyzing system comprising: an access sequence extracting unit configured

to extract an access sequence indicating a continuous access by a same requester based on a Web

access log which relates first identification data indicating an access requester to second

identification data indicating contents to be accessed; a keyword extracting unit configured to

extract, when the Web access log relates second identification data indicating a retrieval system to a

retrieval keyword which is input to the retrieval system by the requester and the retrieval keyword is

input in the access sequence, the retrieval keyword which is input in the access sequence from the

Web access log; and a satisfaction degree calculation unit configured to calculate a qualitative

evaluation value of the access sequence based on a qualitative evaluation rule for defining the

qualitative evaluation value of a retrieval result of the retrieval system, and to create first relation data

indicating a relation between the extracted retrieval keyword and the qualitative evaluation value.

26. A retrieval keyword analyzing system comprising: an access sequence extracting unit configured

to extract, based on a Web access log which relates first identification data indicating an access

requester, second identification data indicating contents to be accessed, and reference information,

an access sequence indicating a continuous access including an access to the contents to be accessed

indicated by the second identification data by a same requester when the reference information

indicates a retrieval system; a keyword extracting unit configured to extract a retrieval keyword

included in the reference information when the reference information indicates the retrieval system;

and a satisfaction degree calculation unit configured to calculate a qualitative evaluation value of the

access sequence after inputting the extracted retrieval keyword based on a qualitative evaluation rule

for defining the qualitative evaluation value of a retrieval result of the retrieval system, and to create

first relation data indicating a relation between the qualitative evaluation value and the retrieval

keyword corresponding to the access sequence.

27. A retrieval keyword analyzing system comprising: a sub-access sequence extracting unit

configured to extract, based on a Web access log which relates first identification data indicating an

access requester to second identification data indicating contents to be accessed, a sub-access

sequence indicating a continuous access by a same requester and having a starting end at which

retrieval result contents are accessed and a terminal end at which a next continuous access starts; a keyword extracting unite configured to extract the retrieval keyword when the Web access log relates second identification data indicating a retrieval system to a retrieval keyword input to the retrieval system by the requester; and a satisfaction degree calculation unit configured to calculate a qualitative evaluation value of the sub-access sequence based on a qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the retrieval system, and to create relation data indicating a relation between the extracted retrieval keyword and the qualitative evaluation value.

28. A retrieval keyword analyzing method comprising the steps of: extracting an access sequence indicating a continuous access by a same requester based on a Web access log which relates first identification data indicating an access requester to second identification data indicating contents to be accessed; extracting, when the Web access log relates second identification data indicating a retrieval system to a retrieval keyword which is input to the retrieval system by the requester, the retrieval keyword from the Web access log; and calculating a qualitative evaluation value of the access sequence based on a qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the retrieval system, and creating first relation data indicating a relation between the qualitative evaluation value and a retrieval keyword which is input in the access sequence.

29. The retrieval keyword analyzing method according to claim 28, further comprising the step of: calculating a quantitative evaluation value of the access sequence based on a quantitative evaluation rule for defining the quantitative evaluation value of a retrieval result of the retrieval system, and

creating second relation data indicating a relation of the retrieval keyword which is input in the

access sequence, the qualitative evaluation value and the quantitative evaluation value.

30. The retrieval keyword analyzing method according to claim 29, wherein the Web access log

further relates access time data to the first identification data and the second identification data; and

the quantitative evaluation value ~~a quantitative evaluation value calculating means~~ creates the second

relation data for each time period based on the access time data, and which further comprises the

step of: creating trend data for the retrieval keyword, the trend data indicating a transition of the

qualitative evaluation value and the quantitative evaluation value based on the second relation data

for each time period.

31. The retrieval keyword analyzing method according to claim 29, wherein the Web access log

further relates an access time data to the first identification data and the second identification data;

and the quantitative evaluation value ~~the quantitative evaluation value calculating means~~ creates the

second relation data for each time period based on the access time data, and which further

comprises the steps of: calculating the qualitative evaluation value and the quantitative evaluation

value for each category and for each time period based on the second relation data and category data

which relates the retrieval keyword to a category to which the keyword belongs; and creating trend

data for the retrieval keyword, the trend data indicating a transition of the qualitative evaluation

value and the quantitative evaluation value for each time period and each category.

32. A retrieval keyword analyzing method comprising the steps of: extracting an access sequence

indicating a continuous access by a same requester based on a Web access log which relates first

identification data indicating an access requester to second identification data indicating contents to be accessed; extracting, when the Web access log relates second identification data indicating a retrieval system to a retrieval keyword which is input to the retrieval system by the requester and the retrieval keyword is input in the access sequence, the retrieval keyword which is input in the access sequence from the Web access log; and calculating a qualitative evaluation value of the access sequence based on a qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the retrieval system, and creating first relation data indicating a relation between the extracted retrieval keyword and the qualitative evaluation value.

33. A retrieval keyword analyzing method comprising the steps of: extracting, based on a Web access log which relates first identification data indicating an access requester, second identification data indicating contents to be accessed, and reference information, an access sequence indicating a continuous access including an access to the contents to be accessed indicated by the second identification data by a same requester when the reference information indicates a retrieval system; extracting a retrieval keyword included in the reference information when the reference information indicates the retrieval system; and calculating a qualitative evaluation value of the access sequence after inputting the extracted retrieval keyword based on a qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the retrieval system, and creating first relation data indicating a relation between the qualitative evaluation value and the retrieval keyword corresponding to the access sequence.

34. A retrieval keyword analyzing method comprising the steps of: extracting, based on a Web access log which relates first identification data indicating an access requester to second identification data

indicating contents to be accessed, a sub-access sequence indicating a continuous access by a same

requester and having a starting end at which retrieval result contents are accessed and a terminal end

at which a next continuous access starts; extracting the retrieval keyword when the Web access log

relates second identification data indicating a retrieval system to a retrieval keyword input to the

retrieval system by the requester; and calculating a qualitative evaluation value of the sub-access

sequence based on a qualitative evaluation rule for defining the qualitative evaluation value of a

retrieval result of the retrieval system, and creating relation data indicating a relation between the

extracted retrieval keyword and the qualitative evaluation value.

Reasons for Indicating Allowable Subject Matter

4.   The following is an examiner's statement of reasons for allowance: Upon searching a variety

of databases, the examiner respectfully submits that "computer readable program code means for

causing a computer to calculate a qualitative evaluation value of the access sequence based on a

qualitative evaluation rule for defining the qualitative evaluation value of a retrieval result of the

retrieval system, and create first relation data indicating a relation between the qualitative evaluation

value and a retrieval keyword which is input in the access sequence." the pervious cited limitations

of claim 1 in conjunction with all other limitations of the dependent and independent claims are not

taught nor suggested by the prior art of record (PTO-892 and 1449). Therefore, all pending claims

1-34 are hereby allowed.

   Any comments considered necessary by applicant must be submitted no later than the payment of the

   issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions

   should be clearly labeled "Comments on Statement of Reasons for Allowance".

Point of Contact

5.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Sherief Badawi whose telephone number is (571) 272-9782. The examiner can

normally be reached on Monday through Friday 7:30-5:00, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Luke S. Wassum/   /S. B./
Primary Examiner   Examiner, Art Unit 2167
Art Unit 2167   5/13/2010